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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,071

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Hamid Hojaji

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11/24/2006

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EXAMINER

CHAPMAN, JEANETTE E

ART UNIT

PAPER NUMBER

3635

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/625,071	<b>Applicant(s)</b> HOJAJI ET AL.	
	<b>Examiner</b> Chapman E. Jeanette	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-115 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-115 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-27, 31-59, 63-85, 90-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlov et al (5588977) in view of Haines et al (5821184).

Haines et al discloses a foam glass blocks of various and numerous densities and pore sizes ranging from  $7\text{lb/ft}^3$ — $42.6\text{ lb/ft}^3$  in density and from .01mm-5mm in pore size. See examples 1-18. These values meet the recited range values and measurements. Haines further discloses that a pore of adhesive compound, thus a closed pore skin, could be applied to one side of a 1-2 inch size block or disk. The measurements in width, surface area, weight and thickness and length vary greatly. See examples 1,3,5, 7, 9, 11, 15. One of ordinary skill in the art would have appreciated the use and designed the properties/measurements most conducive to the use.

Pavlov et al discloses foam glass for tiles in roofs of buildings and for tiles in internal wall lining and external wall surfacing. The foam glass tile includes a density of  $64.427\text{ lb/ft}^3$  (converted from  $1000\text{ kg/mm}^3$ ) and a compression strength of  $8700\text{ lb/ft}^2$  (converted from 60Mpa). Pavlov et al states the pore size can vary depending on the method of making. One of ordinary skill in the art would have appreciated that the measurement values change with the method of making and the method of use. One of ordinary skill in the art would have appreciated arriving at measurement values

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commensurate with the use. From both references, one of ordinary skill in the art appreciates how these values or properties change with the different methods of making. It is clear that if the block or tile is subjected to major compressive forces, you would desire a tile with a maximum compression strength. So variations in the weight over 65 lbs, the width, the thickness, etc.... and the compressive strength over 10,000 lb/ft<sup>2</sup> are viewed as choices obvious to obtain thru option method of making subject to the discretion of use of the article. One of ordinary skill in the art would have appreciated modifying Haines in view of Pavlov or Pavlov in view of Haines to arrive at the foam glass tile with the desired properties and characteristics while using the method to achieve the desired properties and characteristics. With the foam glass having the recited properties, the same is able to withstand /resistant earthquake damage.

Claims 29-30, 60-62, 86-89, 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above references as applied to claim 1 above, and further in view of Fukumoto et al. The tile of Fukumoto et al comprises a closed cell structure and a decorative tile design including an interior portion 10 and the tile outer skin comprises an additive 12 or a pigment to make its surface appear a different color than the interior portion of the tile. The tile may be used in a building or lightweight building façade (column 6, lines 1-12) and having the same recited values as the prior art the same is capable of withstanding earthquake damage.

Glass is known to be made with a textured or glazed surface for aesthetic appeal. The glaze layer is disclosed by Fukumoto et al as conventional. However,

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one of ordinary skill in the art would have added these decorative effects for aesthetic appeal. The same has no bearing on the overall structure and function of the glass.

In view of the above it would have been obvious to decorate the tile using any means known today and appealing to the user or maker as shown by Fukumoto et al.

### ***Response to Arguments***

Applicant's arguments filed September 7, 2006 have been fully considered but they are not persuasive. Applicant argues that "neither its field of application nor its function as a tool for surface preparation as described by the '184 patent is pertinent at all to the field or function of a building material to be used in the building construction such as an interior and exterior facades of buildings, to which the claimed invention of the present application is directed." The examiner responds that applicant's invention is directed to an article or structure not to a method or function. Applicant further states "In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem." The prior art is in applicant's field of endeavor and that field is foamed glass tile. Applicant, again, states Haines does not meet any of the criteria, it is non-analogous art for the purpose of analyzing the obviousness of the subject matter....." In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed

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invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Further, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Again foam glass includes a multiplicity of uses. There is an overlap of features and characteristics. One of ordinary skill in the art of building structures and foam glass would have appreciated the characteristics need to employ the foam glass tile for any desired use; One of ordinary skill in the art would have appreciated knowledge of the above cited references and would have easily been able to come up with the foam glass façade able to function in an earthquake because the limitations of the claims are well within the scope of the Pavlov et al and Haines et al references.

Applicant also argues that the Pavlov reference discloses an example where the granule density of a foam glass material that undergoes the process of "theremal shock". The thermal shock is induced by pouring the material onto inert gas flow or water is the opposite of an annealing process which the foam glass tile of the present application undergoes...According to the '977 patent, the foam glass material that undergoes the process of thermal shock acquires a hollow spherical shape, which is

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clearly not suitable for a tile to be used as interior or exterior facades of a building as the claimed foam glass tile of the present application.” Again applicant is arguing the method of making. Applicant is claiming an article. No link to the structure and the method of making is shown to be critical.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the field of endeavor is foamed glass tile. From the cited prior art foam glass has a multiplicity of functions and uses; applicant is attempting to define patentability by the mere use of the foam glass as a building façade. Applicant has not claimed a method of use. Nor is there a nexus between the function and the structure. Further given the use of haines foam glass being for sanding and scraping etc. , the same is strong enough to be used on buildings. Again, applicant is not claiming a method of use.

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naoko Slack can be reached on 571-272-6848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JEANETTE CHAPMAN  
PRIMARY EXAMINER  
ART UNIT 3635